GP 2186

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In re application of: Varadarajan Srinivasan et

al

Examiner: Matthew Kim

Art Unit: 2186

Technology Center 2100

SERIAL NO.: 09/829,355

FILING DATE: 4/9/2001

Title: Classless Interdomain Routing Using

Binary Content Addressable Memory

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, DC 20231

Sir:

Pursuant to 37 CFR 1.56, 1.97, and 1.98, Applicants bring the following documents to the Examiner's attention in the above-captioned application.

- 1. U.S. Patent No. 4,813,002 issued 3/14/1989 to Joyce et al.
- 2. U.S. Patent No. 4,928,260 issued 5/22/1990 to Chuang et al.
- 3. U.S. Patent No. 4,958,377 issued 9/18/1990 to Takahashi.
- 4. U.S. Patent No. 5,485,418 issued 1/16/1996 to Hiraki et al.
- 5. U.S. Patent No. 5,642,322 issued 6/24/1997 to Yoneda.
- 6. U.S. Patent No. 5,818,786 issued 10/6/1998 to Yoneda.
- 7. U.S. Patent No. 5,870,324 issued 2/9/1999 to Helwig et al.
- 8. U.S. Patent No. 5,920,886 issued 7/6/1999 to Feldmeier.
- 9. U.S. Patent No. 5,999,435 issued 12/7/1999 to Henderson et al.
- 10. U.S. Patent No. 6,000,008 issued 12/7/1999 to Simcoe.
- 11. U.S. Patent No. 6,006,306 issued 12/21/1999 to Haywood et al.
- 12. U.S. Patent No. 6,011,795 issued 1/4/2000 to Varghese et al.
- 13. U.S. Patent No. 6,081,440 issued 6/27/2000 to Washburn et al.
- 14. U.S. Patent No. 6,098,147 issued 8/1/2000 to Mizuhara.
- 15. U.S. Patent No. 6,144,574 issued 11/7/2000 to Kobayashi et al.

- 16. U.S. Patent No. 6,161,144 issued 12/12/2000 to Michels et al.
- 17. U.S. Patent No. 6,237,061 issued 5/22/2001 to Srinivasan et al.
- 18. U.S. Patent No. 6,266,262 issued 7/24/2001 to Washburn et al.
- 19. U.S. Patent No. 6,289,414 issued 9/11/2001 to Feldmeier et al.
- 20. U.S. Patent No. 6,181,698 issued 1/30/2001 to Hariguchi.
- 21. EP 1063827 published 12/27/2000.
- 22. WIPO No. WO 01/11630 published 2/15/2001.
- 23. Patent Abstract of Japan No. 11-102589 published 4/13/1999.
- 24. Kobayashi et al, "A 50-Mpps Longest Prefix Match Search Engine LSI for Multi-gigabit IP Forwarding," Techincal Report of IEICE, November 1998, pp. 7-12.
- 25. Gupta et al, "Routing Lookups in Hardware at Memory Access Speeds," Proc. Infocom, San Francisco, April 1998.
- 26. Robinson, "Pattern Addressable Memory," IEEE Micro, June 1992, pp. 20-30.
- 27. Huang et al, "A Fast IP Routing Lookup Scheme for Gigabit Switching Routers," IEEE 1999, pp.1429-1436.
- 28. Huang, "A Novel IP-Routing Lookup Scheme and Hardware Architecture for Multigigabit Switching Routers," IEEE Journal on Selected Areas in Communications, June 1999, pp. 1093-1104.
- 29. Hayashi et al, "High Speed Table Lookup Engine for IPv6 Longest Prefix Match," IEEE
- 30. Kobayashi et al, "A Longest Prefix Match Search Engine for Multi-Gigabit IP Processing," IEEE, 2000, pp. 1360-1364.
- 31. Kobayashi et al, "A Processor Based High-Speed Longest Prefix Match Search Engine," IEEE, 2000, pp. 233-239.
- 32. Waldvogel et al, "Scalable High Speed IP Routing Lookups," SIGCOMM 1997, Cannes, France, pp.25-35.
- 33. Waldvogel et al, "Scalable High-Speed Prefix Matching," ACM Transactions on Computer Systems, November 2001, pp.440-482.
- 34. Srinivasan et al, "Fast Address Lookups Using Controlled Prefix Expansion," ACM Transactions of Computer Systems, February 1999, pp. 1-10.

A PTO Form 1449 listing these documents is enclosed.

In addition, citation of the above documents shall not be construed as:

- 1. an admission that the documents are necessarily prior art with respect to the instant invention;
- 2. a representation that a search has been made, other than as described above; or
- 3. an admission that the information cited herein is, or is considered to be, material to patentability as defined in 1.56(b).

With respect to item 23, Patent Abstracts of Japan No. 11-102589 published 4/13/1999, which was obtained from the Japanese Patent Offices's (JPO) web site¹, an English translation of the abstract obtained from the JPO web site is provided solely for the Examiner's convenience. Applicants make no assertions as to the accuracy of the translation, and therefore a separate, independent translation of the abstract should be considered.

With respect to item 24, Kobayashi et al, "A 50-Mpps Longest Prefix Match Search Engine LSI for Multi-gigabit IP Forwarding," an English translation of the article (written in Japanese) is provided solely for the Examiner's convenience. Applicants make no assertions as to the accuracy of the translation, and therefore a separate, independent translation of the article should be considered.

Respectfully submitted,

William L Paradice III

Reg. No. 38,990

Dated: May 7, 2002

¹ http://www.jpo.go.jp/

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on May 7, 2002.

What

By:

William L Paradice III